



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/622,372	01/12/2001	Tomoki Sekiguchi	ASA-904	3506

7590 12/10/2003
Beall Law Offices
104 East Hume Avenue
Alexandria, VA 22301

EXAMINER

MASKULINSKI, MICHAEL C

ART UNIT	PAPER NUMBER
----------	--------------

2184

DATE MAILED: 12/10/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/622,372

Applicant(s)

SEKIGUCHI ET AL.

Examiner

Michael C Maskulinski

Art Unit

2184

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Non-Final Office Action

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Goodrum et al., U.S. Patent 6,032,271.

Referring to claims 1 and 6, in column 86, lines 56-64, Goodrum et al. disclose that the bus watcher (manager) can detect for a hang condition on the secondary PCI bus. If a hang condition is detected, the bus watcher sets a bus hang pending bit, which causes the SIO (I/O bus manager) to power down the slots on the secondary PCI bus and a non-maskable interrupt (NMI) to be transmitted to the CPU (transmitting an I/O bus signal from said manager to an I/O bus manager in said computer at a predetermined point of time to inform said I/O bus manager of occurrence of an I/O bus fault to thereby make said I/O bus manager initialize said I/O bus). The CPU responds to the NMI by invoking an NMI routine to isolate the slot(s) causing the hang condition. Once identified, the defective slot(s) are disabled or powered off (and then informing a CPU in said computer of said I/O bus fault as an interruption to be processed by an OS operated by said CPU).

Referring to claims 2 and 7, in column 86, lines 56-64, Goodrum et al. disclose that the bus watcher (manager) can detect for a hang condition on the secondary PCI bus (wherein said predetermined point of time is a point of time when a fault occurs in said computer).

Referring to claims 3 and 8, in column 87, lines 41-50, Goodrum et al. disclose that the bus watcher includes a watch-dog timer to determine whether the secondary bus has locked up. If the watch-dog timer expires, then the bus has hung. The following are examples of bus-hang conditions that can be detected by the watch-dog timer: The FRAME.sub.-- signal is stuck high or low; the signal TRDY.sub.-- is not asserted in response to IRDY.sub.-- ; the PCI arbiter does not grant the bus to any master; and a master requesting the bus keeps getting retried (wherein said predetermined point of time is a point of time when an incorrect data is transmitted from said computer to said manager).

Referring to claims 4 and 9, in column 87, lines 57-64, Goodrum et al. disclose that the NMI handler calls a BIOS isolation handler for isolating the defective slot or slots. Otherwise, other NMI procedures are called (wherein said OS carries out fault processing in response to said interruption).

Referring to claims 5 and 10, in column 87, lines 24-29, Goodrum et al. disclose a bus hang condition occurring in the middle of a write/read phase. Further, in column 87, lines 41-50, Goodrum et al. disclose that the bus watcher includes a watch-dog timer to determine whether the secondary bus has locked up (wherein said

predetermined point of time is a point of time when said computer does not update contents of a predetermined storage device within a predetermined time).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,204,864	Won
U.S. Patent 5,659,681	Ojima
U.S. Patent 6,098,137	Goodrum et al.
U.S. Patent 6,463,554 B1	Budelman et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C Maskulinski whose telephone number is (703) 308-6674. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W Beausoliel can be reached on (703) 305-9713. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

MM


ROBERT BEAUSOLIEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100